

What is claimed is:

1. (on screen nudge controls) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:
  - displaying a control comprising a drag region, an incrementer region, and a decrementer region, the drag region comprising a text box displaying a value for the parameter;
  - in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value, changing the value of the parameter;
  - in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction, dynamically incrementing the value of the parameter;
  - in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction, dynamically decrementing the value of the parameter;
  - in response to receiving user input placing the graphical pointer within the incrementer region and clicking, incrementing the value of the parameter;
  - and
  - in response to receiving user input placing the graphical pointer within the decrementer region and clicking, decrementing the value of the parameter.
2. (contextual menu with recent values) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:
  - displaying a control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value, changing the value of the parameter;  
in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction, dynamically incrementing the value of the parameter;  
in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction, dynamically decrementing the value of the parameter; and  
in response to a user command for displaying recent values, displaying a contextual menu of recent values.

3. The method of claim 2, wherein the user command for displaying recent values is a click and hold.

4. The method of claim 2, wherein the user command for displaying recent values is a right click.

5. The method of claim 2, wherein the user command for displaying recent values is a click combined with a modifier key.

6. (multiple granularity control) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:

displaying a control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value, changing the value of the parameter;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction, dynamically incrementing the value of the parameter at a first rate;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction, dynamically decrementing the value of the parameter at the first rate;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer a third direction, dynamically incrementing the numeric value at a second rate;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a fourth direction, dynamically decrementing the numeric value at the second rate.

7. (differentiate drag from increment) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:

displaying a first control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value, changing the value of the parameter;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a first axis, dynamically changing the value of the parameter; and

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a second axis,

recognizing the input as an attempt by the user to drag and drop the value into second control.

8. The method of claim 7, wherein the recognizing the input occurs only when the dragging the graphical pointer along the second axis exceeds a tolerance angle from the first axis.

9. (mouse focus & scroll) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:

displaying a control comprising a drag region, the drag region comprising a text

box displaying a value for the parameter;

in response to receiving user input hovering a graphical pointer over the text box

and keying in a value, changing the value of the parameter;

in response to receiving user input hovering the graphical pointer over the drag

region and dragging the graphical pointer in a first direction, dynamically

incrementing the value of the parameter;

in response to receiving user input hovering the graphical pointer over the drag

region and scrolling a mouse wheel in a first direction, dynamically

incrementing the value of the parameter; and

in response to receiving user input hovering the graphical pointer over the drag

region and scrolling a mouse wheel in a second direction, dynamically

decrementing the value of the parameter.

10. (set useful range) A method of receiving user input for changing a parameter via a graphical user interface, the method comprising:

displaying a control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value, changing the value of the parameter;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction, dynamically incrementing the value of the parameter;

in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction, dynamically decrementing the value of the parameter;

in response to receiving user input placing the graphical pointer within the drag region to a first side of the text box and a user command for displaying boundaries, displaying a contextual menu to select a upper boundary for the value; and

in response to receiving user input placing the graphical pointer within the drag region to a second side of the text box and user command for displaying boundaries, displaying a contextual menu to select a lower boundary for the value.

11. The method of claim 10, wherein the user command for displaying boundaries is a click and hold.

12. The method of claim 10, wherein the user command for displaying boundaries is a right click.

13. The method of claim 10, wherein the user command for displaying boundaries is a click combined with a modifier key.

14. (unlike parameter ganging) A method of receiving user input for changing parameters via a graphical user interface, the method comprising:

displaying first and second controls, each control comprising a drag region, each drag region comprising a text box displaying a value for a parameter;  
in response to receiving user selection of at least two controls, activating the at least two controls;  
in response to receiving user input dragging one of the at least two controls, dynamically changing the parameters values corresponding to the at least two controls.

15. The method of claim 14, further comprising:

in response to receiving user input positioning a graphical pointer within the text box of one of the at least two controls, clicking, and keying in a value, changing the value of the at least two controls.

16. A computer program product for receiving user input for changing a parameter via a graphical user interface, comprising:

a software portion configured to display a control comprising a drag region, an incrementer region, and a decrementer region, the drag region comprising a text box displaying a value for the parameter;  
a software portion configured to change the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

a software portion configured to dynamically increment the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction;

a software portion configured to dynamically decrement the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction;

a software portion configured to increment the value of the parameter in response to receiving user input placing the graphical pointer within the incrementer region and clicking; and

a software portion configured to decrement the value of the parameter in response to receiving user input placing the graphical pointer within the decrementer region and clicking.

17. A computer program product for receiving user input for changing a parameter via a graphical user interface, comprising:

a software portion configured to display a first control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

a software portion configured to change the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

a software portion configured to dynamically change the value of the parameter in response to receiving user input placing the graphical pointer within the

drag region, clicking, and dragging the graphical pointer along a first axis;  
and

a software portion configured to recognize an attempt by the user to drag and drop  
the value into second control in response to receiving user input placing  
the graphical pointer within the drag region, clicking, and dragging the  
graphical pointer along a second axis.

18. The computer program product of claim 17, wherein the software portion  
configured to recognize an attempt by the user to drag and drop the value into second  
control recognizes only drags of the graphical pointer along the second axis greater than a  
tolerance angle from the first axis.

19. A computer program product for receiving user input for changing parameters via  
a graphical user interface, comprising:

a software portion configured to display first and second controls, each control  
comprising a drag region, each drag region comprising a text box  
displaying a value for a parameter;

a software portion configured to activate at least two controls in response to  
receiving user selection of at the least two controls;

a software portion configured to dynamically change the parameter values  
corresponding to the at least two controls in response to receiving user  
input dragging one of the at least two controls.

20. The computer program product of claim 19, further comprising:



a software portion configured to change the value of the at least two controls in response to receiving user input positioning a graphical pointer within the text box of one of the at least two controls, clicking, and keying in a value.

21. A system for receiving user input for changing a parameter via a graphical user interface, comprising:

a software portion configured to display a control comprising a drag region, an incrementer region, and a decrementer region, the drag region comprising a text box displaying a value for the parameter;

a software portion configured to change the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

a software portion configured to dynamically increment the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction;

a software portion configured to dynamically decrement the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction;

a software portion configured to increment the value of the parameter in response to receiving user input placing the graphical pointer within the incrementer region and clicking; and

a software portion configured to decrement the value of the parameter in response to receiving user input placing the graphical pointer within the decrementer region and clicking.

22. A system for receiving user input for changing a parameter via a graphical user interface, comprising:

a software portion configured to display a first control comprising a drag region, the drag region comprising a text box displaying a value for the parameter; a software portion configured to change the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

a software portion configured to dynamically change the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a first axis; and

a software portion configured to recognize an attempt by the user to drag and drop the value into second control in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a second axis.

23. The system of claim 22, wherein the software portion configured to recognize an attempt by the user to drag and drop the value into second control recognizes only drags of the graphical pointer along the second axis greater than a tolerance angle from the first axis.

24. A system for receiving user input for changing parameters via a graphical user interface, comprising:

a software portion configured to display first and second controls, each control comprising a drag region, each drag region comprising a text box displaying a value for a parameter;

a software portion configured to activate at least two controls in response to receiving user selection of at the least two controls;

a software portion configured to dynamically change the parameter values corresponding to the at least two controls in response to receiving user input dragging one of the at least two controls.

25. The system of claim 24, further comprising:

a software portion configured to change the value of the at least two controls in response to receiving user input positioning a graphical pointer within the text box of one of the at least two controls, clicking, and keying in a value.

26. A system for receiving user input for changing a parameter via a graphical user interface, comprising:

means for displaying a control comprising a drag region, an incrementer region, and a decrementer region, the drag region comprising a text box displaying a value for the parameter;

means for changing the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

means for dynamically incrementing the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a first direction;

means for dynamically decrementing the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer in a second direction;

means for incrementing the value of the parameter in response to receiving user input placing the graphical pointer within the incrementer region and clicking; and

means for decrementing the value of the parameter in response to receiving user input placing the graphical pointer within the decrementer region and clicking.

27. A system for receiving user input for changing a parameter via a graphical user interface, comprising:

means for displaying a first control comprising a drag region, the drag region comprising a text box displaying a value for the parameter;

means for changing the value of the parameter in response to receiving user input positioning a graphical pointer within the text box, clicking, and keying in a value;

means for dynamically changing the value of the parameter in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a first axis; and

means for recognizing an attempt by the user to drag and drop the value into second control in response to receiving user input placing the graphical pointer within the drag region, clicking, and dragging the graphical pointer along a second axis.

28. The system of claim 27, wherein the means for recognizing an attempt by the user to drag and drop the value into second control recognizes only drags of the graphical pointer along the second axis greater than a tolerance angle from the first axis.

29. A system for receiving user input for changing parameters via a graphical user interface, comprising:

means for displaying first and second controls, each control comprising a drag region, each drag region comprising a text box displaying a value for a parameter;

means for activating at least two controls in response to receiving user selection of at the least two controls;

means for changing the parameter values corresponding to the at least two controls in response to receiving user input dragging one of the at least two controls.

30. The system of claim 29, further comprising:

means for changing the value of the at least two controls in response to receiving user input positioning a graphical pointer within the text box of one of the at least two controls, clicking, and keying in a value.